

CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A system, comprising:

a serial bus; and

a host device coupled to the serial bus, the host device coupled to control communications on the serial bus, the host device having a interrupt logic element to indicate to the host device to enter an interrupt mode, the host device to transmit a set interrupt mode signal onto the serial bus after entering the interrupt mode, the set interrupt mode signal to indicate to a client device to be coupled to the serial bus to enter the interrupt mode.

2. (Original) The system of claim 1 wherein the host device is further coupled to withhold transmitting a start of frame (“SOF”) packet after transmitting the set interrupt mode signal for at least a time period equal to a frame duration.

3. (Original) The system of claim 1 wherein the host device is coupled to request data from the client device in response to the host device receiving an interrupt request signal while in the interrupt mode.

4. (Original) The system of claim 3 wherein the interrupt request signal further serves as a resume signal when received by the host device while not in the interrupt mode.

5. (Original) The system of claim 3 wherein the host device is further coupled to request the data only from client devices to be coupled to the serial bus to enter the interrupt mode in response to receiving the set interrupt mode signal.

6. (Original) The system of claim 5 wherein a period of time required by the host device to request the data from the client devices coupled to enter the interrupt mode is less than a period of time of serial bus inactivity that will cause the client devices to enter a suspend state.

7. (Original) The system of claim 1 wherein the serial bus comprises a universal serial bus.

8. – 13. (Cancelled)

14. (Original) A client device, comprising:
a serial bus port, the serial bus port to be coupled to a host device; and
an interrupt logic element coupled to the serial bus port, the interrupt logic element to indicate to the client device to enter an interrupt mode in response to the interrupt logic element receiving a set interrupt mode signal.

15. (Original) The client device of claim 14 wherein the interrupt logic element further to indicate to the client device to enter the interrupt mode in response to detecting

an absence of a start of frame packet signal for at least a time period equal to a frame duration after receiving the set interrupt mode.

16. (Original) The client device of claim 15 wherein the client device to drive an interrupt request signal onto the serial bus port while the client device is in the interrupt mode, the interrupt request signal to be sent in response to an interrupt event.

17. (Original) The client device of claim 14 further comprising:

a non-interrupt capable interface, the non-interrupt capable interface to be enabled when coupling the client device to a non-interrupt capable hub device or a non-interrupt capable host device; and

an interrupt capable interface, the interrupt capable interface to be enabled when coupling the client device to an interrupt capable hub device and/or a interrupt capable host device.

18. (Original) The client device of claim 16 wherein the interrupt request signal further serves as a resume signal when the client device is not in the interrupt mode.

19. (Original) The client device of claim 14 wherein the serial bus port comprises a universal serial bus port.

20. (Currently Amended) A method, comprising:

coupling a host device to a client device via a serial bus;

generating interrupt data in response to an interrupt event;
entering an interrupt mode at the direction of the host device;
after entering the interrupt mode, sending an interrupt request signal,~~after~~
~~entering the interrupt mode,~~ to the host device in response to the interrupt data; and
exiting the interrupt mode.

21. (Original) The method of claim 20 wherein the method is performed without the client device entering a suspend state.

22. (Original) The method of claim 21 wherein entering the interrupt mode comprises receiving a set interrupt mode signal from the host device.

23. (Original) The method of claim 22 wherein entering the interrupt mode further comprises detecting an absence of a start of frame packet for at least a time period equal to a frame duration after receiving the set interrupt mode signal.

24. (Original) The method of claim 21 wherein the interrupt request signal further serves as a resume signal when sent by the client device in a suspend state.

25. (Original) The method of claim 20 wherein entering the interrupt mode comprises idling the serial bus until the client device enters a suspend state, the host device initiating the idle serial bus.

26. (Original) The method of claim 25 wherein sending the interrupt signal comprises sending a resume signal from the client device to the host device while the client device is in the interrupt mode, the host device capable to interpret the resume signal as an interrupt request.

27. (Original) The method of claim 26 wherein exiting the interrupt mode comprises transmitting a resume signal from the host device onto the serial bus for at least a period of time required by the client device to recover from the suspend state.

28. (Currently Amended) A machine-readable medium on which a plurality of machine instructions are stored that when executed by a machine performs the operations of:

entering a host device of a serial bus into an interrupt mode;

sending a set interrupt mode signal from a host device to a client device coupled to the host device, the set interrupt mode signal to indicate to the client device to enter the interrupt mode;

withholding transmission of a start of frame packet from the host device after sending the set interrupt mode signal for at least a time period equal to a frame duration;

receiving an interrupt request signal sent from the client device; and

exiting the host device from the interrupt mode.

29. (Cancelled)

30. (Original) The machine-readable medium of claim 28 wherein the interrupt request signal further serves as a resume signal when received by the host device while not in the interrupt mode.